

removable release layer being made of a separate polyethylene film as stated in the OA. Quite the contrary, Col. 4, lines 55-60 of Johnson reads as follows:

“Some illustrative examples of homopolymers and copolymers that may be used in the release layer of the release liner of the invention include, but are not limited to, butylene; isobutylene; high, medium, low, and linear low density polyethylene; ethylene vinyl acetate; ethylene acrylic acid; ethylene methyl (meth)acrylate; ethylene butyl acrylate; polypropylene; ethylene/propylene copolymers; and impact resistant ethylene/propylene copolymers.” (emphasis added).

Accordingly the applicant notes Col. 4, lines 55-60 identifies polymers and polymeric materials but does not define the polymers or materials as being in the form of a polymer film.

More importantly, the applicant notes the emphasised language of Col. 4, lines 55-60 which clearly defines the “release layer” is being a component in a “release liner”.

In Johnson the “release liner” comprises a non-woven sheet layer with a release layer (see Abstract and Col. 1, lines 65-Col. 2, lines 12) with the invention in Johnson being the structure of the non-woven sheet layer (Col . 2, lines 31-35) which comprises two or more sheets of non-woven fibrous layers (Col 2, lines 32-35). Moreover Johnson explicitly explains the importance of the structure of the non-woven support sheets in relationship to the release layer in its specification which states:

“The support sheet utilized in the release liner of the present invention is nonwoven, e.g., a non-woven web. An advantage of support sheets having holes and interstitial voids therein is that the polymeric material of the release layer may penetrate into, and in some instances penetrate substantially through and saturate, the web. Such penetration typically results in mechanical, as well as adhesive, fastening of the support sheet and release layer, providing a firmer bond there between than is provided by interfacial adhesion alone. The non-woven fibers are also bonded integrally within the non-woven matrix. The resultant release liner thus exhibits greater resistance to delamination with easier startability of removal typically being provided.” Johnson at Col. 3, lines 16-29.

Accordingly Johnson provides no teaching of a polyethylene film being used as either the release layer or being used in the release liner; and even if there were such a teaching the above language from Johnson regarding the structure of the non-woven support sheet in relationship to the release layer teaches away from using a film-like material because of the importance of the woven structure of the support sheet in “providing a firmer bond there between than is provided by interfacial adhesion alone.” The applicant further submits that the OA then continued to make another incorrect statement on Page 3, second paragraph about the teachings in Johnson when it further mischaracterizes the teachings from Johnson as follows:

“..., and a second separate layer that would function as an adhesive made of ethylene acrylic acid (Col . 4, lines 67-Col. 5, lines 25; the friction layers adheres the release layer to above layers of similar material when in a stacked position.”

It is the applicant’s position that the examiner’s conclusions about the teachings of Johnson are simply wrong because on closer inspection of paragraph at Col. 4, lines 67-Col. 5, lines 25 there is clear and convincing evidence that completely contradicts the conclusions reached in the above statement.

First the paragraph at Col. 4, lines 67-Col. 5, lines 25 starts by explaining that it is teaching about a release liner with an optional friction-enhancing agent:

“In some instances, release liners of the invention may further comprise an optional friction-enhancing agent on the major surface of support sheet opposite the major surface on which the release layer is disposed.”

As stated above in Johnson the “release liner” is defined as being a non-woven support sheet fabric layer with a release layer. The beginning of paragraph at Col . 4, lines 67-Col. 5, lines 25 further explains that the release liner may also have an optional friction-enhancing agent “on the major surface of support sheet opposite the major surface on which the release layer is disposed”. Accordingly the

paragraph is describing a non-woven fiber fabric with a release layer on one side and a frictional-enhancing agent on the other side of the fabric.

The paragraph then describes an application for such a material; the rolling of a dual functional adhesive tape along with the treated non-woven fiber fabric to create a roll of adhesive tape which has its different adhesive layers protected by the treated fabric:

“In applications where the release liner is to be used on an adhesive-coated article such as dual-functional tape, e.g., coated with a tacky pressure-sensitive adhesive on one side and a tack-free heat-activated adhesive on the other side which is wound into roll form, the back surface of the support sheet will be wound into contact with the heat-activated adhesive-coated side of the tape.”

Accordingly as described in the paragraph the roll of tape and fabric would have the following repeating layered structure: tape material/heat-activated adhesive/ friction-enhancing agent/ non-woven fiber fabric support sheet/ release liner/pressure-sensitive adhesive/tape material.

The paragraph then concludes with “[i]llustrative examples of such agents include ethylene/acrylic acid mixtures containing tackifiers which provide improved performance when applied to polyethylene support sheets for use on release liners used with tapes with back sides made of olefin-based, very low tack heat-activated adhesives.”

Accordingly as described in Johnson the ethylene/acrylic acid mixtures are a friction-enhancing agent that are placed on a non-woven fabric that is removable from a “very low tack heat-activated adhesive” side of a tape, and the polyethylene “support sheet” is in the form of a non-woven fabric material and not a film. Furthermore as shown above the friction-enhancing agent layer can never be adhered to the release layer as they are on opposite sides of the non-woven support fabric and each face a different functional adhesive side of the dual-functional adhesive tape.

Claim 80-85 inclusive

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For the reasons above, the applicant respectfully submits that the OA has not established a sufficient basis to find independent claim 80 obvious under 35 USC 103(a).

As claims 81-85 are dependent on claim 80, and claim 80 has been traversed above, then the 103(a) obviousness arguments for rejecting claims 81-85 as have also been traversed.

Conclusion

In conclusion the applicant respectfully submits that the basis for the 103(a) obviousness rejections to claims 80-85 inclusive in the August 30, 2010 Final Office action was incorrect as the cited patent of Johnson (US Pat. No. 5,178,924) does not teach the limitations of the protective layer as claimed in claims 80-85 inclusive. Accordingly the 103(a) obviousness rejections have been traversed and claims 80-85 should be granted.

Respectfully Submitted,

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